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THE PRESENT UTILIZATION OF PSYCHOLOGICAL TESTS

IN EAST CENTRAL ILLINOIS

(TITLE)

BY

Donald A. Tolen

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

MASTER OF SCIENCE IN EDUCATION

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

1966

YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING
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THE PRESENT UTILIZATION OF RURAL SCHOOL SITES IN EAST-CENTRAL ILLINOIS

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CHAPTER I

STATEMENT OF PROBLEM AND OBJECTIVES

Determining the geography of an area often is difficult. Accuracy and completeness require extensive field study and analysis of the vast quantity of data collected. Many times a geographer does not have the time required to make detailed and complete field coverage or the degree of thoroughness found in regional analysis is not warranted. Since the geographer is interested in accuracy, he should examine the area with techniques which yield the highest degree of accuracy in relation to the amount of time and effort available. If a geographer's time is limited then he must select a sample from the area studied which is as nearly typical of the entire area as is possible.

This study is an attempt to determine what can be learned about an area by using rural school sites as samples. What happened to the old school buildings and sites? What are their new functions? Why were some of the buildings destroyed while others remain a part of the landscape? What factors, cultural and physical, have been involved in ultimate utilization of the buildings and sites? Are rural school sites reliable samples the researcher can examine to gain insight into the entire area? Are the data gathered from the sites reliable indicators of the areas in which they are located? Do they reveal patterns or other geographic conditions? Can regional

delimitations and boundaries be determined from schools or sites? Is there a distributional pattern giving an areal character to site use? The above questions will be explored and analyzed in this paper as based on the author's study of rural school sites.

From an outgrowth of the author's curiosity toward rural schools comes an attempt to use a sampling technique based on detailed field study of all rural school sites of a selected area. It is felt that this study is of interest in that most of the sites lost their function as a school within a period of five years (1945-50) thus providing an opportunity to examine changes which have occurred in site and building use in different areas and to analyze the factors responsible for such changes.

The Study Area (Plate I)

A study area was selected by using the following areal associations:

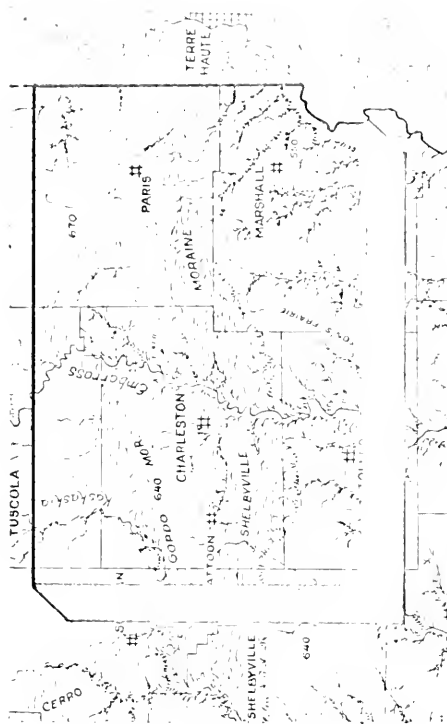
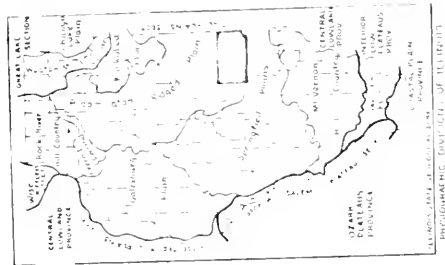
1. The area includes portions of the three major land-form areas of east-central Illinois. (Plate II)
 - A. Shelbyville Moraine Belt--This Moraine marks the southern limit of Wisconsin glaciation in Illinois. It is an area of forest soils and the greatest relative relief of the three sections. The Moraine is also considered to be a boundary separating the Cash Grain and General Farming Regions of east-central Illinois.
 - B. Bloomington Ridged Plain--This Plain is located in the northern half of the study area. This is an area of prairie soils except along the streams where soils developed under forest vegetation. Within the study area are wide stretches of relatively flat or gently undulating terrain.
 - C. Springfield Plain--This Plain, composed predominately of forest soils developed on Illinoian till, is located to the south of the Shelbyville Moraine.



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PLATE 1. THE STUDY AREA



LANDSCAPES OF ILLINOIS

BY

James A. Tier
1936

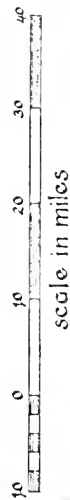


PLATE II
RELATION OF STUDY AREA TO PHYSIOGRAPHIC
REGIONS OF ILLINOIS

Erosion and leaching have been more extensive on this Plain resulting in soils that are thinner and poorer quality than the prairie soils.¹

2. The study area was to include sections of the Cash Grain and General farming regions of east-central Illinois. (Plate III)
3. Eight standard topographic maps were selected which represent a continuous area of approximately 1880 square miles.² (3.3 per cent of the total area of the State of Illinois) Within this study area are three hundred eighty-two school sites. Such was considered to be a large enough sample from which to draw valid conclusions.

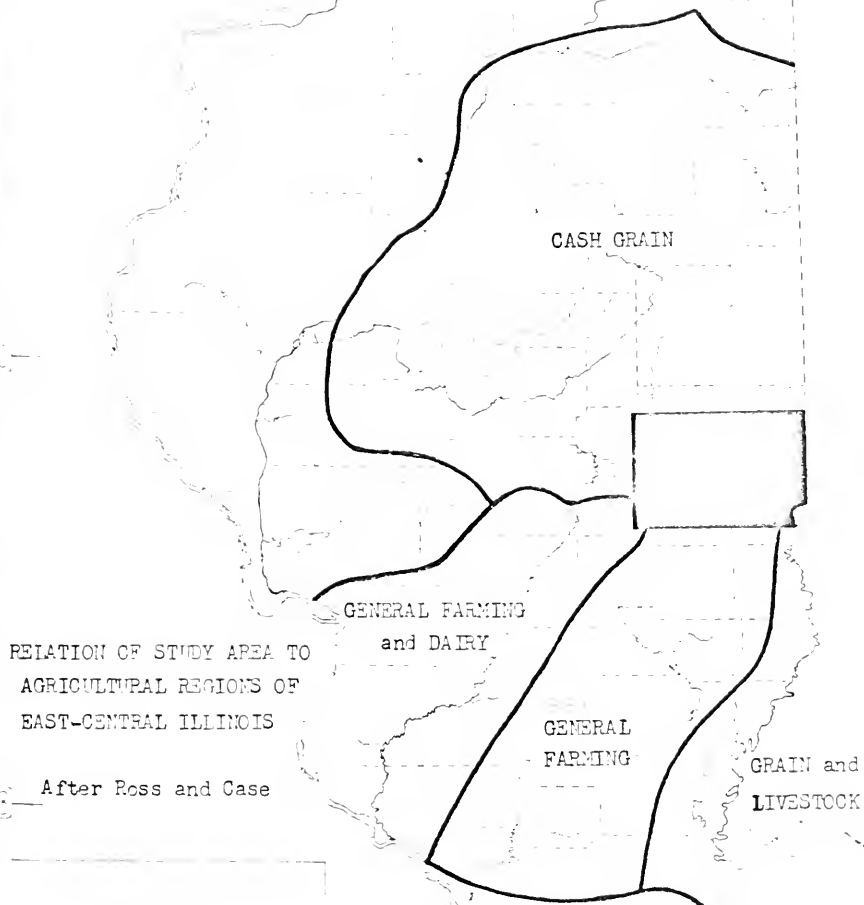
The Field Study

Locations of the school sites were determined from topographic maps. East-central Illinois was mapped by the United States Geological Survey in the 1930's and 1940's. Schools in existence at that time were plotted by symbol and name as shown on Plate IV on page 11. Few rural schools were built after 1950 following the statewide consolidation movement which began in the late 1940's. In a few instances the maps were in error in that some schools were not located by name or symbol, or the map indicated a wrong location. In such instances the topographic maps used in the study were corrected.

To analyze the changes which have occurred in site and building use in residential areas, several hamlet schools were observed. It is believed that these hamlets are more rural than

¹Leighton, M.M., Bidlaw, George E., and Horberg, Leland, "Physiographic Divisions of Illinois," Abstract.

²The following Illinois quadrangles on the scale 1:62500 were used: Arcola, Oakland, Kansas, Paris, Mattoon, Toledo, Jasey, and Marshall.



RELATION OF STUDY AREA TO
AGRICULTURAL REGIONS OF
EAST-CENTRAL ILLINOIS

After Ross and Case

PLATE III

urban oriented and thus are significant to the study.

The author organized and completed an extensive program of field work. Check lists were prepared prior to the field work. Data were obtained from observation of each school site. Interviews were made with as many persons as possible. Color slides were taken of buildings and sites when weather permitted. These pictures helped avoid the necessity of revisitation of sites to obtain additional information. It was also planned to use color pictures extensively to illustrate the final paper. Because the bulk of this study is original material, the pictures provide evidence of the collected data and help support the statements made in this paper. Pictures also record data about each school site which was impossible to record in the check lists.

In addition it is hoped that check lists and photographs provide adequate records for use in future studies. Such information might be difficult to obtain in later years.

CHAPTER II

DEVELOPMENT AND DISTRIBUTION OF RURAL SCHOOL SITES

Rural schools have been a traditional part of American culture since whitemen settled the frontier of the Midwest. Through the years as the rural population increased so did the number of schools which became a common landmark.

As a consequence of modern technology, farm machinery helped reduce the physical labor required for farm work. The average size of farms has steadily increased. Fewer farm laborers now are necessary and thus former laborers migrate from rural to urban locations. During the war years, 1940-45 the farm population of the United States was reduced by more than 4,500,000. Large urban schools gradually replaced the rural schools.¹ The original law permitting formation of community unit districts was enacted in 1947 by the State of Illinois.²⁻³ From 1947 to the present there has been a rapid decline in student enrollment in one-room rural schools. Thus began a period of enrollment unification in which the original and major function of the rural school was abandoned. Without rural

¹Your School District, (Washington: Department of Rural Education, 1948), p. 26.

²Community Unit Schools, (Illinois Education Association, Dec., 1952), pp. 10-11.

³The law of 1947 (referred to on page 5) only permitted the establishment of community unit districts. However, a great number of rural schools closed in the year 1946 and consolidated their attendance with larger village or hamlet schools.

education the school property was no longer needed by the school units thus resulting in sale of this property to persons interested in either the land or buildings or both.¹ Since consolidation the new functions of the buildings and sites form an interesting and hopefully significant part in the study of rural geography.

For practical reasons schools are usually located near crossroads. On the Grand Prairie² of east-central Illinois, level terrain made it possible to construct country roads in accordance with the range and township surveying system with relative ease. Today most country roads on the flatter areas coincide with section lines and intersect at right angles. The distribution of schools on flat terrain forms a regular block pattern such as the road pattern. A variation on the pattern was produced by a correction

¹According to Sec. 5-32, in the 1963 School Code of Illinois, issued by the Office of the Superintendent of Public Instruction, State of Illinois, any rural school which failed to operate for two consecutive years was automatically dissolved and the property subject to sale at public auction.

Many schools were built on property that was donated by local individuals. According to N. E. Hutson, Legal Advisor to the Office of the Superintendent of Public Instruction, State of Illinois, in correspondence dated April 11, 1966, "If the deed contained a reverter clause and such reverter was created more than 40 years prior to 1939, then no action may be commenced for recovery of the land. If there was no reverter clause in the deed to the school site, then it remains the property of the school district and if the board determines it will not be needed for school purposes, then they may by resolution properly adopted notify the county board of school trustees that they desire to have the property sold at public auction, in accordance with Section 5-22 of the School Code."

²John Garland states in The North American Midwest, (New York: John Wiley and Sons, Inc., 1955), p. 96, that "The Grand Prairie occupies the area east of the middle Illinois valley, south of the upper Illinois-Kankakee valley, west of the Wabash valley, and north of the Shelbyville Moraine, which terminates that Wisconsin system of glaciation."

Cakland, Illinois Quadren-1e-1:62500

line that interrupted the near regular grid pattern.

Road construction on rough terrain, along streams, or on glacial moraines resulted in an irregular pattern of road distribution. When schools were established in areas of rough terrain, they were distributed along existing roads. As a result, the distributional pattern along streams is irregular too. (Plate IV, page 11)

Settlement of the prairie generally came after settlement of forest areas.¹ Thus followed the need for education which resulted in the establishment of rural schools. A school's effectiveness depended on its location, since accessibility to a walking student body was an important factor. At first there was an attempt to establish rural schools two miles apart.² This spacing provided each school with an area of four square miles from which to draw attendance.³ The two mile spacing was practical in relation to the attendance and distance the students were required to walk.

Many times a crossroads location was not favorable for the establishment of a school site. If the land was not physically

¹Ibid., p. 97.

²Interview with Coles County Superintendent of Schools, June 8, 1966.

³The majority of students had to walk one mile to and from school. It was necessary to close some schools not having an attendance large enough to operate effectively prior to 1940, (See footnotes, page 9) This made it necessary for some students to walk as far as four or five miles each day between their home and school. In the early 1940's just prior to consolidation, several rural schools offered a type of specialized education. Each school was assigned a grade level. A student was then transported to the school where his grade level was offered.

suitable, the school was located away from the crossroads. The State of Illinois issued requirements regarding drainage and water supply on school sites.² For these reasons the more favorable sites are on high ground which provides adequate natural drainage. Another factor involved in distribution is an adequate water supply.

A school was located in most hamlets. These schools served approximately the same area as outlying rural schools except that they served a greater population. This larger number of students made it necessary for more than one room and one teacher. The regular pattern of school distribution was slightly altered with the presence of a hamlet school.

¹Interview with Coles County Superintendent of Schools, June 8, 1966.

²Earl, Edward C., The Schoolhouse, (Washington, D.C., 1919), p. 5.

CHAPTER VIII

AMISH EDUCATION IN CLARK COUNTY

Schools in operation

Amazingly enough thirteen schools presently are in operation within the study area. Eight of these are one-room schools near the community of Arthur. (Plate V, in folder.) Presence of this religious group in the area accounts for the current existence of these schools. Placing little value on the necessity of modern-formal education, the Amish people feel that their one-room rural schools are adequate and even necessary for the educational needs of their children. The Amish believe that eight years of education in rural schools is adequate for their future needs and thus does not favor secondary education.¹

Two rural schools currently are operating near Martinsville because of local resentment against consolidation of elementary attendance in the area. Both schools are relatively modern buildings providing facilities for grades 1-2. The schools are recognized by the State and receive State funds. They have survived without the previous hostility against consolidation of schools. The relatively expensive operation of these schools is due to the fact that

¹Price, Dallas A. and Steiner, J. W., "The Amish Community of Arthur, Illinois," Bulletin of the Illinois Amish Historical Society, Vol. VII, (June, 1958), p. 12.

²Interview with Clark County Superintendent of Schools, June 15, 1966.

progressive citizenry make it foreseeable in the near future for these schools to be abandoned.¹

Two other schools are in hamlet locations and are also operated for elementary attendance. Rardin School located eight miles north and east of Charleston is a large two-story building which houses grades 1-6.² Kemp School, located six miles east of Arcola, is in another hamlet location and includes grades 1-2.

Hwellings--Occupied

Increasing farm size and improved methods of mechanized farming, have created a decline in the number of farms and farm laborers and an increase in the number of abandoned rural buildings. Because of the migration of population during the 1940's from the rural to urban areas, there was a decreasing demand for homesites by people actively engaged in farming.³ Most of the rural schools were closed during the period 1945-50 adding to the already large number of abandoned rural buildings. But unlike abandoned homesites, the good condition of many school buildings did not warrant complete abandonment. As long as the schools operated, the buildings were maintained by the district school board. It was recognized before the schools closed that many of these abandoned buildings could

¹Interview with Clark County Superintendent of Schools, March 22, 1966.

²On June 4, 1966 a school bond election was defeated by the citizens of the Charleston Community Unit. If it had been accepted by the people, Rardin School would be closed and replaced by a modern rural attendance center in the same area.

³Garland, loc cit., p. 27-28.



Fig. 3-1.--Operating school at Rardin.

be economically purchased and easily converted into dwellings.¹⁻²

Today the pattern of distribution of occupied school buildings in the study area closely correlates with the distribution of rough terrain. (Plate VI, in folder) There is a general absence of occupied sites on the flat prairie as compared to areas that are forested and along streams. A partial explanation of the above distributional association is that a greater rural population density is found on the Shelbyville Moraine and Springfield Plain than the Bloomington Ridged Plain. On the Bloomington Ridged Plain larger farms and fewer families are actively engaged in agriculture as compared to the Springfield Plain.³ The occupied buildings on the Bloomington Ridged Plain are almost entirely limited to sites with wooded or rough terrain not favorable to cultivation. (Figs. 3-2 and 3-3) (See Appendix)

Some occupants of school buildings are working in a nearby community and prefer to live in the rural area. Many owners indicate that it is more economical to live in a schoolhouse than to live in a similar sized home in an urban area. In a few instances a farmer has purchased a school site to provide housing for his

¹According to the Coles County Superintendent of Schools in an interview on June 8, 1966, several persons were interested in purchasing school sites before the schools closed.

²The author attempted to correlate the present use of rural school buildings and sites with the last year they were operated as schools. It was thought that the later schools to close would be in better condition and would be those most likely to be utilized as dwellings. It was discovered that this information was not readily available at some County Superintendent of Schools' Offices.

³York, Troy B., "An Interpretation of Agricultural Land Use across the Shelbyville Moraine," (unpublished Master's thesis, 1963 Department of Geography, Eastern Illinois University), pp. 55-56.



Fig. 3-2.--Occupied school building surrounded by woods on the
Bloomington Ridged Plain.



Fig. 3-3.--Occupied school building in a rough terrain location
on the Bloomington Ridged Plain.

hired men. However, few occupants are engaged in local farming. Of the eighty-six buildings presently occupied, only ten families are gainfully employed in agriculture on a full time basis and one family on part-time basis.

Some families have moved onto the site with little expenditure of capital for remodeling the buildings. The water well, toilets, and shed are available for immediate use. The degree of remodeling of the building is related to the requirements or discriminating desires of the owner.

Socio-economic class is indicated by education, occupations of the sixty-seven adults interviewed, and the condition of the dwellings. (Figs. 3-4 and 3-5) Only one person from a total of thirty-five families interviewed has acquired a college degree. Three persons have three years of college, one person has two years and five persons have one year. From the total of one hundred ninety-one present occupants (sixty-seven of which are adults) only forty-five have high school degrees. Twenty of the sixty-seven adult occupants are laborers in nearby towns. Only three heads of families are classified as being skilled while seven are semi-skilled.

From 1945 to 1950 the average purchase price for a wooden frame one-room school building and site (usually one acre) was approximately \$1500. With an additional \$1500 (in 1950) the owner could install a bathroom, false ceiling, room dividers and an electric water pump. This \$3000 investment in the building and site was far cheaper than the erection of a new building the same size on a vacant lot. The average expense of purchasing and remodeling a school site and building was also much cheaper than the purchase

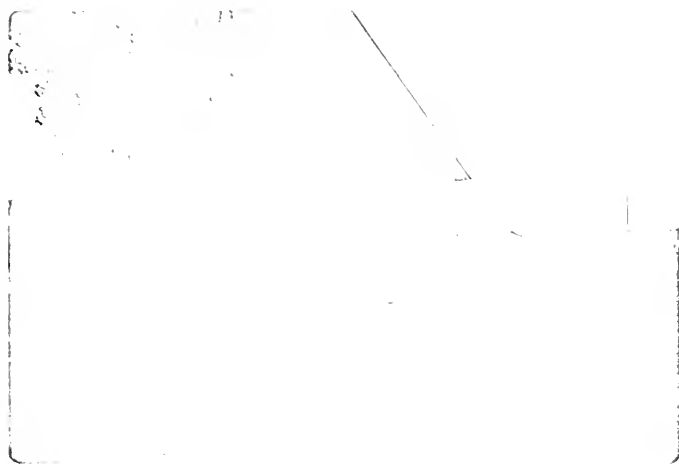


Fig. 3-4.--An occupied school building with a limited degree of remodeling. Located north east of Greenup on the Springfield Plain.



Fig. 3-5.--The occupied Lost Creek School north of Toledo.

and remodeling of an abandoned schoolhouse and site. Another reason for preference of schools over abandoned farm homes is that a farm site usually contains several buildings which a non-farming occupant has little use for. It is then impractical to pay the price of these farm sites if the home is all that is to be utilized.

Two school buildings presently occupied consist of one large room without dividers separating the kitchen, living room, or bedroom. Several of the buildings occupied by persons of 15 to 20 show structural weakness partitions. The single room with 10 dividers. The absence of a false ceiling reduces the privacy of each room but permits better circulation of heated air from the stove's furnace.

Many of the newer houses which have been built for only a few years are in very good condition. These sold for between \$1,500. (Figs. 2-6 and 3-7) They are large and airy and are expansive schools are structurally able to be remodeled into the buildings and be then into excellent homes. If the school is not large enough for the family, additional rooms are easily added to the basic structure. Many times it is difficult to believe that these dwellings are remodeled rural schools. (Figs. 2-6 and 3-9)

A water well is a great asset to most school site buyers. Many school wells are the best in the local area. Operation of a school in an area requires the presence of a well that can provide an adequate supply of water.¹ During droughts some school wells supplied water for neighboring farms whose wells failed. In many instances the only visible evidence of a former school site is

¹Earl, loc. cit., p. 15.



Fig. 3-6.--A large brick rural school south of Kansas remodeled into a modern dwelling.



Fig. 3-7.--A large rural school east of Martinsville remodeled into a modern dwelling.

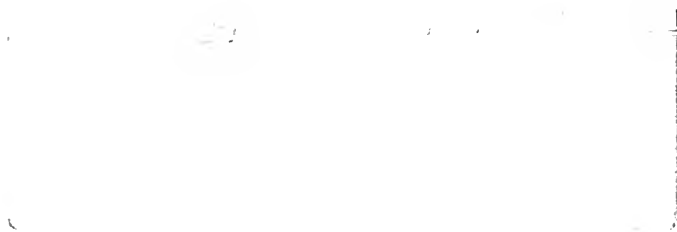


Fig. 3-8.--An occupied school building in the Cash Grain Region north of Mattoon on the Cerro Gordo Moraine.



Fig. 3-9.--A school building occupied by a local farm family in the Cash Grain Region north of Charleston.

the water well. (Fig. 3-10) Many owners feel that it is to their advantage to save the well for use during prolonged drought years and for additional fire protection.

Seven of the twenty-five market schools within the study area are remodeled into dwellings. (Fig. 3-11) These schools were abandoned when there was some demand for dwellings in the small residential areas. The factor preventing more of the market schools from being occupied is the greater demand for buildings as community centers. Another factor is that some of the buildings are too large to be economically remodeled for residential use.

Dwellings--Unoccupied

Numerous school buildings have been purchased by farmers who own adjacent land to provide a home for their farm laborers. (Fig. 3-12) Later mechanization brought about replacement of the hired man; thus, these buildings were abandoned. (Fig. 3-13) Buildings previously utilized as a hired man's residence are usually not maintained very well. Many of the buildings were in relatively poor condition the year the school closed. After a few years of occupation the buildings were permanently abandoned. (Fig. 3-14)

As long as a site remains abandoned, it is a financial burden to the owner. The site cannot be entirely cultivated or pastured if the buildings are present, and taxes are greater than if the site were cultivated. These conditions have led to the destruction of abandoned buildings by the owners who cultivate the site or leave it vacant.

Not all of the twenty-two abandoned dwellings were once



Fig. 3-10.--Presence of water well on former school site surrounded by a cultivated field in a prairie area on the Springfield Plain.

Fig. 3-11.

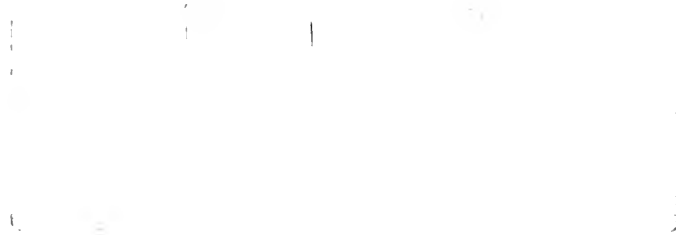


Fig. 3-11.--An occupied school in the hamlet of Clarksville.



Fig. 3-12.--A school site utilized as a tenant dwelling northeast of Toledo on the Springfield Plain.

Fig. 3-13.--An unoccupied school west of Charleston in the Cash
Grain Region formerly utilized as a tenant dwelling.

Fig. 3-14.--An abandoned school north of Charleston in the Cash
Grain Region formerly utilized as a tenant dwelling.

occupied by hired men. Some schools were purchased by non-farming families who abandoned the sites after a few years' residence. Usually in these instances the deterioration of the buildings hastened abandonment.

Distribution of Occupied and Unoccupied Dwellings

TABLE I
OCCUPIED AND UNOCCUPIED DWELLING SITES

Landform Area	Number of Occupied Sites	% of Occupied Sites in Landform Area	Number of Unoccupied Sites	% of Unoccupied Sites in Landform Area	Total Number of Sites in Landform Area
Bloomington					
Ridged Plain	28	15.6	12	6.4	172
Shelbyville					
Moraine	24	39.3	5	8.19	61
Springfield					
Plain	35	24.7	6	4.2	142

Occupied and unoccupied dwellings are generally concentrated in areas of rough terrain throughout the study area. (Fig. 3-15) A significant pattern of distribution lies within the study area in relation to the three major landforms. (Table I) The highest percentage of occupied dwellings is on the Shelbyville Moraine. Here is found the highest percentage of unoccupied dwellings as well. In the Bloomington Ridged Plain area only 15.6% of the total sites are occupied as compared to 24.7% on the Springfield Plain. The percentage of abandonment is greater on the Bloomington Ridged Plain than on the Springfield Plain. The Bloomington Ridged Plain has a greater percentage of its total area cultivated than either the



Fig. 3-15.--A dwelling abandoned by a non-farming family in a rough terrain area northwest of Marshall.

Springfield Plain or Shelbyville Moraine. The Shelbyville Moraine has the greatest relative relief of the three areas with the smallest percentage of cultivated land. A greater rural population density exists on the Moraine because of the large number of small farms. As a result dwellings are more in demand and fewer are unoccupied on the Moraine than on either the Bloomington Ridget or Springfield Plain.¹

Buildings Utilized for Farm Structures

The second most common use of former school buildings within the study area is conversion for farm storage. (Plate VII, in folder) Seventy-seven buildings (29.2% of the total school sites in the study area) are utilized to store machinery, grain, hay, or provide shelter for livestock. Few owners provide an extra expenditure of capital to adapt such buildings to their new function.

The distribution of buildings now utilized as farm structures correlates very closely with locations within the study area where general farming is practiced.² Most of the farms on and south of the Shelbyville Moraine are classified as general farms. There is an absence of these buildings on the flat or into areas of the Bloomington Ridget Plain where cash grain farming has been developed.

¹Ross, R. C. and Case, H. C. M., Types of Farming in Illinois, University of Illinois Agricultural Experiment Station, Bulletin 601, April, 1956, p. 30.

²Throughout this paper reference is made to the terms, cash grain and general farming. These terms were recognized by the United States Census of 1950. In order that a farm be classified as a cash grain or a general farm, it must derive 50 per cent or more of its total income from sales of the specified product or group of products. ibid., p. 30.

extensively.¹ The farmer's emphasis is towards cash grain with few animals being raised, limiting the number of buildings that would be required for hay or animal feed storage or livestock shelter within the Cash Grain Region.

Cash grain farmers have little need for the school buildings as compared to those persons practicing general farming. Today a cash grain farmer's machinery consists of items too large for storage in most one-room school buildings. For this reason the machinery is usually stored in a modern "pole-barn" near the farmer's residence. Farm machinery of the General Farming Region is smaller and less than that in the cash grain region. Small school buildings provide adequate machinery storage in the General Farming Region while larger structures are necessary for the same purpose in the Cash Grain Region.

The type of grain stored in the buildings indicates the type of farming of an area. A person practicing general farming with several head of livestock has a greater need for a school building than does a cash grain farmer. Grain for animal consumption can be adequately stored in a building in relatively poor condition. Field observations in a general farming region indicate the presence of livestock because of the storage of ear corn to be used for animal consumption. (Fig. 3-16) Some buildings serve as sturdy storage facilities for grain whose owners raise only a few livestock. (Fig. 3-17) The two figures (3-16 and 3-17) referred to above help illustrate the care with which cash grain must be stored. A cash grain farmer cannot store grain in most of the school

¹Ibid., pp. 45-46, 54-57.



Fig. 3-16.--Brick school building on the Springfield Plain southwest of Martinsville utilized to store ear corn for farm livestock consumption.



Fig. 3-17.--Brick school building north of Charleston utilized for cash grain storage on the Bloorington Ridged Plain.

buildings because of their poor condition. The old buildings are grain farmer is forced to construct sturdy metal bins for grain storage purposes.

Sections are easily added to the main school buildings if a larger structure is necessary. These additions are usually constructed to provide an enlarged storage space for farm machinery. (Fig. 3-19) In such instances the main building is usually reserved for the storage of grain, hay, or smaller machinery or miscellaneous items that can be entered through the original door.

In five instances farm animals are sheltered in former school buildings. (Figs. 3-19 and 3-20) Two of these five buildings are on sites which are not effectively cultivated because of rough terrain or woods. (Fig. 3-21 and 3-22)

Twenty of the seventy-seven sites (25.8%) presently utilized as farm buildings are partially cultivated by the owners. (Plate VI) The owners of these twenty sites feel it a waste of unproductive land if the site is entirely unused or if only the building is used. Sometimes part of the site is not cultivated because of the presence of large trees. (Fig. 3-23) There is an increasing emphasis towards removal of trees and placing part of the site under cultivation. (Figs. 3-24 and 3-25) A small plot of land if cultivated would be an asset to the owner after a few years if it were not for the cost of removal of trees and low fertility of the site.

At times buildings are moved completely to permit cultivation of the site. One example was found where the owner moved the school building to a more favorable location for the storage of hay and grain. (Fig. 3-26) An addition provided shelter for livestock. The



Fig. 3-18.--School, northeast of Grandview, on the Bloomington Ridged Plain used as a farm building with an added machine shelter.

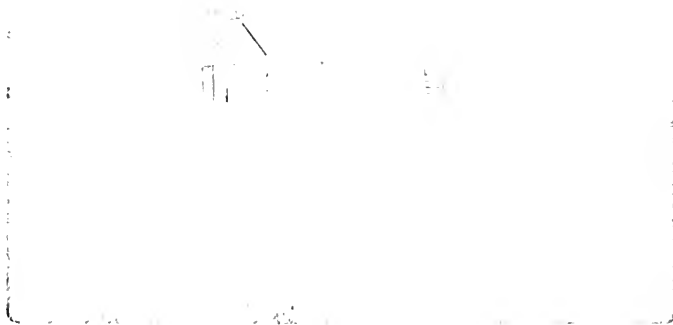


Fig. 3-19.--Brick school building utilized as an animal shelter.
Located on a hill four miles east of Westfield. Site
used as a feedlot for hogs.



Fig. 3-20.--Brick school building northwest of Westfield on the
Shelbyville Moraine utilized as an animal shelter.
Site used as a feedlot for hogs.

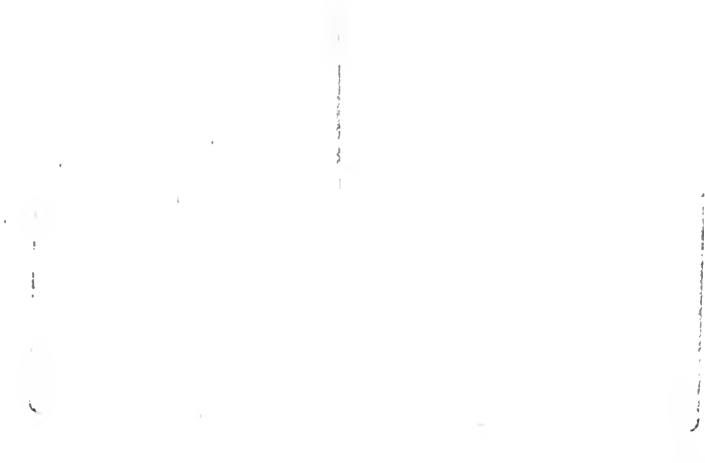


Fig. 3-21.--School building four miles east of Westfield utilized as an animal shelter.



Fig. 3-22.--School southeast of Oakland utilized for hay storage in a wooded area on the Bloomington Ridged Plain.



Fig. 3-23.--School building northeast of Westfield utilized for
hay storage on a site with several large trees.



Fig. 3-24.--School building on the Springfield Plain utilized for grain and fertilizer storage with part of the site cultivated. Site indicates the influence of cash grain farming and intense use of land.

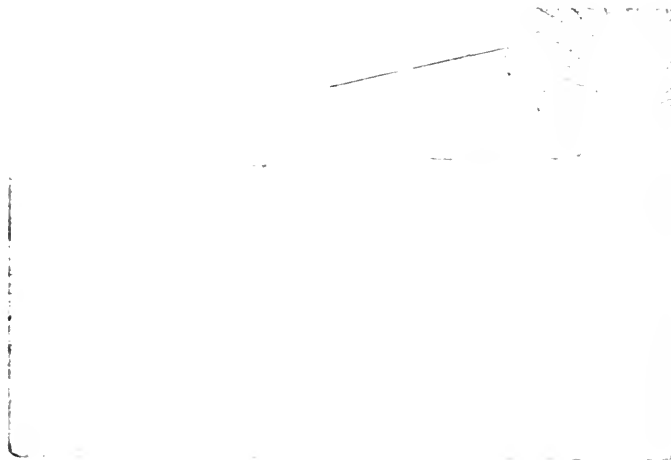


Fig. 3-25.--School building on the Springfield Plain utilized for farm machinery storage with part of the site cultivated. Site indicates the owner's emphasis towards increased grain production.

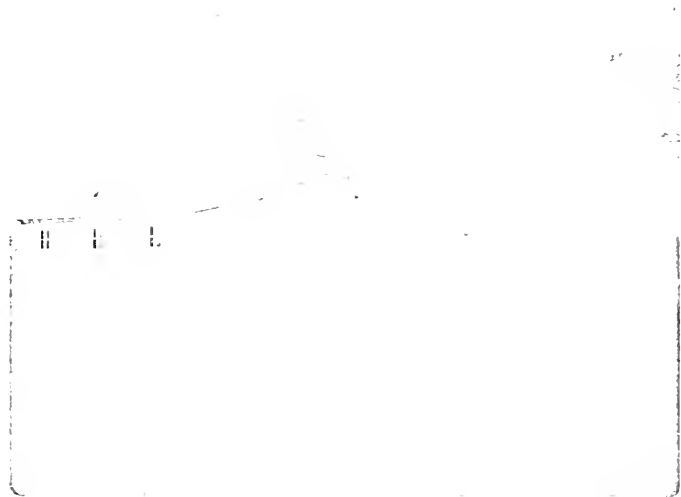


Fig. 3-26.--School building eight miles southeast of Neog, moved
to a more favorable location for hay and grain storage.

site which the building presently occupies was previously a feedlot. The former school site is now added to the adjacent cultivated field.

Ten buildings were utilized for miscellaneous storage by farmer-owners. Usually lumber, furniture, or various items used occasionally on the farm are stored in such buildings. Objects stored outside the buildings are considered "junk" by the neighbors as well as the owners. (Fig. 3-27)

Buildings Standing Unused

Seventeen sites with the school buildings intact are classified as having no apparent use. (Plate IV) Four of the sites are still owned by school districts and will soon be sold at public auction. Twelve of the seventeen unused schools were sold by the districts and have no visible signs of use. Each of the seventeen unused buildings shows signs of abandonment. Many sites are overgrown with small saplings and weeds. Perhaps a few sites were once utilized; however, no indication of former use was noted when field observation was made.

Isabel School, located nine miles northwest of Kansas in the hamlet of Isabel, is too large to be economically purchased and remodeled. In addition it would be too expensive to destroy the building and trees to warrant the site placed under cultivation. (Fig. 3-28)

School sites with the buildings presently unused bear no significant distributional pattern within the study area. Several sites are on rough terrain while others are located on relatively flat terrain. On each site are large shade trees, outhouses, and



Fig. 3-27.--School building one mile southwest of Charleston
utilized for miscellaneous and "junk" storage.

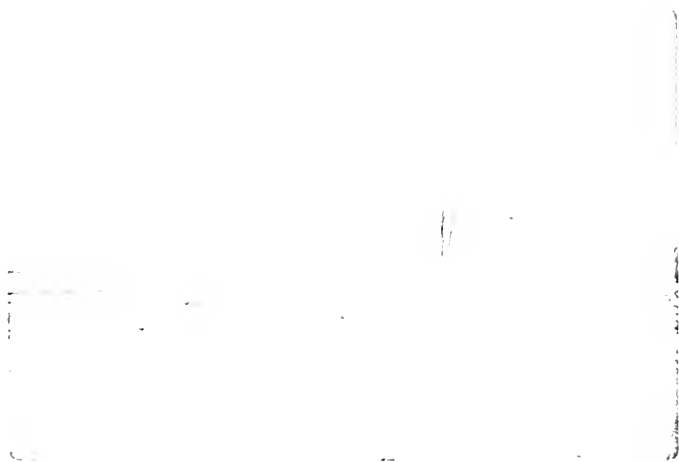


Fig. 3-28.--The unused school building located in the hamlet of Isabel.

the water well. Electric wires to each building are disconnected. Also most of the windows and doors are covered to prevent vandalism.

Other Uses

Twenty school buildings are still intact on original sites which for convenience are placed under the classification "Other Uses". (Plate V) The majority of these buildings (14) serve as recreational centers for 4-H clubs, church groups, a riding club, and a coon-hunting association. Four larger than average buildings are remodeled into community centers. (Figs. 3-25 and 3-30) Three buildings are classified as having commercial functions. Two are rural groceries located on the Springfield Plain along major highways. (Figs. 3-31 and 3-32) The third building, also on the Springfield Plain, is an anhydrous dealer's store located in the hamlet of Darwin seven miles southeast of Marshall. (Fig. 3-33) Clark Center School, located along the highway between Marshall and Martinsville, was once remodeled into a church; however, the owner moved before it was completed. (Fig. 3-34) It was later utilized as a grocer but closed because of poor business. Clark Center probably has too small a population to warrant use of this former school for commercial purposes.

Religious and social groups have been able to purchase rural school sites at lower than average bids at public auction. It did not seem proper to bid against a church or social group during an auction. Four schools were purchased for church needs by adjacent country churches. (Fig. 3-35) One of the last rural schools constructed in east-central Illinois was purchased and remodeled to replace a former country church building. (Fig. 3-36)



Fig. 3-29.--The school building in the hamlet of Grandview presently utilized as a community center.



Fig. 3-30.--The school building in the hamlet of Dudley presently utilized as a community center.



Fig. 3-31.--The rural grocery in the former Wevey Park School.

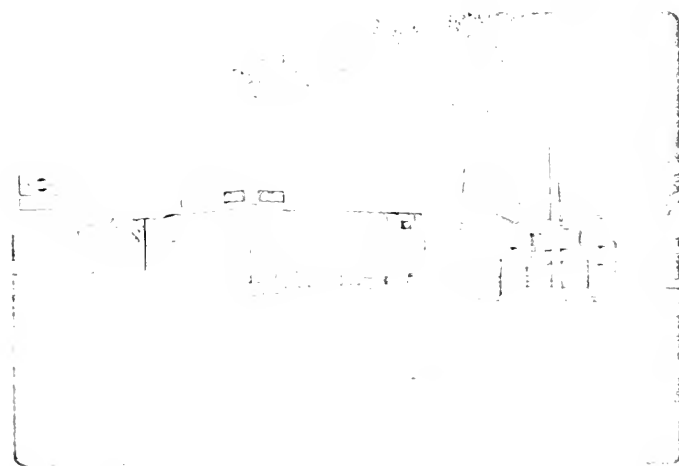


Fig. 3-32.--The rural grocery in the former Hickory Corner School.



Fig. 3-33.--An anhydrous fertilizer store in the former Darwin School in the hamlet of Darwin.



Fig. 3-34.--Abandoned former grocery establishment in the hamlet school at Clark Center.

Buildings classified as having "other uses" throughout the study area are generally located on rough terrain. The exception to this pattern of distribution is found with the absence of school buildings classified as having "other uses" in the northwestern part of the study area. Erosion in this, the most extensively developed cash grain area, as a whole, is not advanced. Rural population density is lower thus limiting the chances for the sites being used as rural recreational centers or for religious or commercial uses.¹

¹York, loc. cit., pp. 55-56.



Fig. 3-35.--The Garland Church Center adjacent to the Garland Church.



Fig. 3-36.--A church established in a former school building in a cash grain area on the Springfield Plain.

CHAPTER IV

PRESENT LAND USE OF FORMER SCHOOL SITES

Sites Cultivated

Although rural schools were once landmarks common throughout east-central Illinois, today few school buildings remain in some sections. Present distribution of school sites that are entirely or partly cultivated indicates that the type of farming in an area is partially responsible for destruction of school buildings and use of the site itself.

Within the study area, a total of seventy-five school sites (19.4% of the total) are entirely cultivated. (Plate VIII, in folder) Fifty-two of these (69%) are located on the Bloomington Ridged Plain in the recognized Cash Grain Region. On the Springfield Plain in the recognized General Farming Region, twenty such sites (26.7%) exist while only three (4%) are entirely cultivated on the Shelbyville Moraine. Such distribution indicates that farmer-owners emphasize cultivation of every available square foot of land possible; this factor has led to the destruction of school buildings. (Fig. 4-1)

Several reasons, both physical and cultural, help explain the large number and distribution of cultivated school sites within the study area. Probably the most important is that the sites were usually bought by farmers owning adjacent land. The majority of these sites were purchased in 1945-50 when few non-farming families were seriously interested in moving to the country and few people



Fig. 4-1.--School building west of Oakland in the Cash Grain Region
being torn down to enable the owner to increase his
grain production.

actually made bids at public auctions. Since most of the sites were purchased by farmers, use of the sites was destined to be some phase of agriculture.

TABLE II
SITE CULTIVATION

Landform Area	Total Number of Schools	Number of Sites Entirely Cultivated	Per Cent of Total	Number of Sites Partially Cultivated	% of Total
Bloomington					
Ridged Plain	179	52	29.0	17	9.5
Shelbyville					
Moreine	61	3	4.9	1	1.6
Springfield					
Plain	142	20	14.1	15	10.6

A farmer purchasing a site has one of several ideas in mind. He usually places an emphasis on the buildings or land or both. If he employs a hired man, he sometimes wants the site to provide living quarters for the employed man's family. If he wants only the land to cultivate and has little use for the buildings, he can get back a good portion of his purchase price by selling the buildings or moving them to another location. Some farmers revealed during interviews that they purchased sites to prevent the buying of such sites by a non-farm family. Many times school sites were bought for use as farm buildings or for sentimental reasons. After several years of grain or machinery storage, the deterioration of buildings warranted destruction. With the buildings gone the site was easily added to adjacent fields and cultivated.

Farmers throughout the study area are becoming more interested in mechanized grain production as illustrated by the development of

larger fields with the removal of fences and timber. (Fig. 4-2 and 4-3) An abandoned school site is nearly worthless to a cash grain farmer who has little use for the buildings or timber on the site. Such a farmer's objective is to obtain as great a profit from the highly productive soils as possible which usually results in the cultivation of the sites after the destruction or removal of the buildings and timber.

Removal of the school building from a site may not immediately be profitable for the owner. Several problems have to be overcome. A few sites have virgin soil while others are known to have been fallow for half a century. These soils are less productive than an adjoining soil which has yearly applications of fertilizer. Soils that were beneath the buildings are very infertile. Such soil lacks organic matter and most of the necessary mac- and micro-nutrients. (Fig. 4-4) In some instances the soil quality is too poor to support a growth of weeds the first time the soil is cultivated. (Fig. 4-5) Soybeans are planted on one site to help control weeds and help renew soil fertility. (Fig. 4-6)

For several years after a school building is removed or destroyed, some construction material remains. Pieces of brick, glass, and nails are ever present and present problems for the farmer. (Fig. 4-7) It takes about ten years to convert a school site into full productive grain farming. By that time regular additions of organic matter and fertilizer have built up the fertility of the site to approximately the same level as the surrounding soil. Finally most signs of the former school site are removed.



Fig. 4-2.--School site, located on the prairie east of Wndsboro,
completely converted into cash grain cultivation.



Fig. 4-3.--Prairie school site completely obscured by cash grain
farming landscape near Redon.



Fig. 4-4.--Retaining outline of school building on the prairie five miles north of Kansas indicating inferior soil.

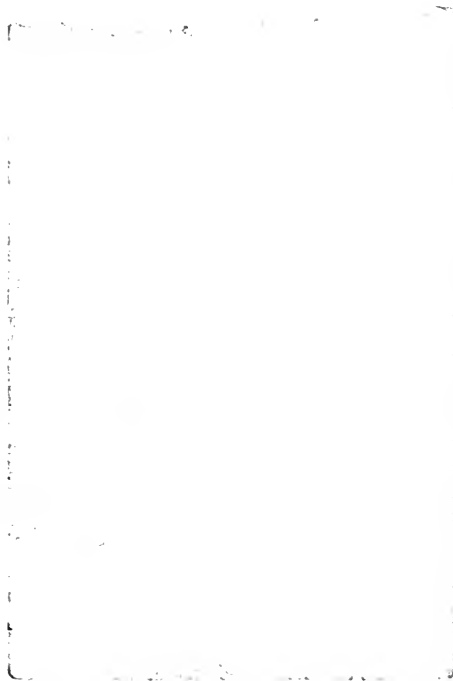


Fig. 4-5.--Unproductive soil once the site of a rural school building
on the Springfield Plain east of Casey.



Fig. 4-6.--An attempt to control weeds and improve soil fertility by planting a legume on a former school site southwest of Redman.



Fig. 4-7.--Remains of school building pose problems for cultivation.

Only one site of all in the study is entirely cultivated and cannot be classified as being in cash grain production--a garden plot adjacent to an occupied farmhouse.¹ Corn was observed on forty-four sites (58.7% of the 75 cultivated sites), soybeans on twenty-one (28%), clover on four (5.3%), winter wheat on four (5.3%), and springwheat on one (1.3%).² (Plate IX, in folder) Clover was judged to be a rotation crop with corn and soybeans. In most instances trees and fences are removed making sites easy to cultivate with machinery.

Cultivation of school sites is an indication of cash grain farming's coming importance within the recognized Cash Grain Region on the Bloomington Ridget Plain. On most of the sites entirely or partially cultivated a cash grain (usually corn) is planted. A larger concentration of sites appears north of the Cerro Gordo Moraine, (Plate VIII) on the most extensively developed prairie located within the study area. The Cerro Gordo Moraine does not form a definite break within the Cash Grain Region. Eight of the twenty-one school sites situated on the Moraine are cultivated. The distribution of cultivated sites on the Cerro Gordo Moraine indicates that much of the Moraine can be readily adapted to cash grain farming.

¹School sites were observed during and after the growing season over an eleven month period (August, 1965 through June, 1966). Because of this a site is classified according to the last crop observed.

²According to Louis Christen, Coles County Farm Bureau Agent, in a telephone interview on June 16, 1966, the percentages of harvested crops in Coles County are approximately: Corn, 50%, soybeans 34%, wheat 1%. These percentages are considered to be typical of the entire study area.

Greater emphasis towards cash grain farming is developing south of the Shelbyville Moraine on the Springfield Plain and in the general farming area. Twenty school sites (14.1% of the total on the Springfield Plain) are presently being entirely cultivated while fifteen (10.6%) are partially cultivated. (Plate VIII, in folder) These sites are located on the broader interflaves where larger fields are becoming more common. All of these sites (35) are planted to a cash grain crop taking on the appearance of cash grain farming through the elimination of fence rows. According to the United States Agricultural Crop and Stabilization Service at Toledo in a personal interview in May, 1966, seventy-five per cent of the farming area of Cumberland County is presently classed as cultivated by cash grain farms. A similar increase in cash grain farming is found in Clark County. In general the cultivated school sites are located on the broader interflaves.

The larger number of partially cultivated sites on the Springfield Plain indicates a recent development of cash grain production within the region generally recognized as general farming. At present the sites which are entirely cultivated on the plain are those on the most level terrain and most productive soils. Usually such sites are on the broad interflaves where development of large fields is possible. Most of the sites which are partially cultivated sites indicates potential areas where the emphasis of cash grain farming could develop in the future.

The Shelbyville Moraine offers very little possibility for the establishment of extensive cash grain farming. This moraine

contains very rough terrain with much of the area being too poor or steep to cultivate. The approaches to the Moraine are more gentle to the north than along the southern boundary thus five sites along the northern boundary are cultivated. Only four sites are cultivated on the Moraine.

Cultivation of school sites indicates that a separate cash grain region is developing south of the Shelbyville Moraine on the Springfield Plain. Rough terrain of the Shelbyville Moraine divides the two cash grain regions. (Plate IX, in folder) It is foreseeable that the sites on the Springfield Plain that are partially cultivated will be entirely cultivated as the cash grain emphasis increases. Meanwhile the Shelbyville Moraine will remain an area where general farming will predominate. These findings are in conflict with those of previous writers who have located the southern boundary of the Cash Grain Region on the Shelbyville Moraine. Ross and Case in Types of Farming in Illinois, placed the division of the Cash Grain-General Farming Region along the southern boundary of the Shelbyville Moraine.¹ (Plates III and IX, in folder) John H. Garland in The North American Midwest indicates that the Shelbyville Moraine marks the southern boundary of the Cash Grain Region.² These boundaries probably were once correct but they are presently outdated and need to include all areas where cash grain farming predominates.

Development of cash grain farming on the Springfield Plain

¹Ross and Case, loc. cit., p. 32.

²Garland, loc. cit., p. 46.

is in part possible because of several factors. The continual destruction of timber on the interfluvies, elimination of timber and fence rows results in larger fields which the farmer can easily cultivate in an extensive program. Also with applications of improved fertilizers the increased yield per acre motivates the farmer to raise more grain and fewer head of livestock. Probably government price support on grain production helps stimulate the farmers to raise grain wherever possible and to engage less in livestock farming where no price supports have been established. Another factor is that there is a trend for farmers to become specialized in one type of farming with the preference toward cash grain farming over livestock because of the greater profits and smaller amount of labor involved.

New Dwellings on Former Sites

Many times the scenic attraction of a school site remains after the building is destroyed or moved. (Fig. 4-8) Twenty-three new dwellings are constructed on former school sites, taking advantage of their scenic location and the availability of an excellent water well. Most of the families involved had first occupied the school building. They prefer to rebuild on the former site rather than on a new location.

Many of the new dwellings appear to possess modern conveniences not present in a remodeled school building. Former school buildings were generally in poor condition and made remodeling uneconomical. (Fig. 4-9) No significant distribution was discovered. (Plate VI in folder)



Fig. 4-8.--New dwelling constructed on a scenic school site west of Hindsboro on the Bloomington "Idleed" plain.



Fig. 4-9.--Modern dwelling located on the prairie north of Hedmon on a former school site.

Sites Pastured

Only twenty school sites (9.2% of the total school sites in the study area) are pastured. (Plate V, in folder) These sites are generally in areas of greater relief throughout the study area where livestock farming is practiced. Few school sites that are pastured are in areas where cash grain farming prevails. (Fig. 4-10) An isolated pasture of less than one acre is of little value to most farmers. When the surrounding land is pastured, the site is simply incorporated into it. Several wells on sites are retained to provide water for the livestock.

Sites Presently Vacant

One of the factors involved in what happens to a school site is the existence of large trees around the school buildings. These trees offer scenic beauty to the site and provide a windbreak. Many of the twenty-one vacant sites are associated with terrain too rough to cultivate. After the school closes the relief and vegetation make cultivation difficult. If the buildings are in poor condition, they are destroyed to salvage the lumber or reduce the taxes assessed to the owner. Sometimes the buildings are moved from the site to another more favorable location leaving the site vacant. The cost and effort of removing the trees would explain why some sites have remained vacant after the building was removed. (Plate V, in folder) (Figs. 4-11 and 4-12) After the trees are cut, their stumps interfere with planting of crops on the site. (Fig. 4-13)

Another factor concerning the presence of vacant sites is the "whim" of the owner. A few owners will not sell, or cultivate

Fig. 4-10.--Pastured school site on the Bloomington Ridged Plain
near Kansas.



Fig. 4-11.--Vacant school site in the Cash Grain Region south of Oakland with the shade trees remaining.



Fig. 4-12.--Vacant school site west of Leona in the General Farming Region with several trees.

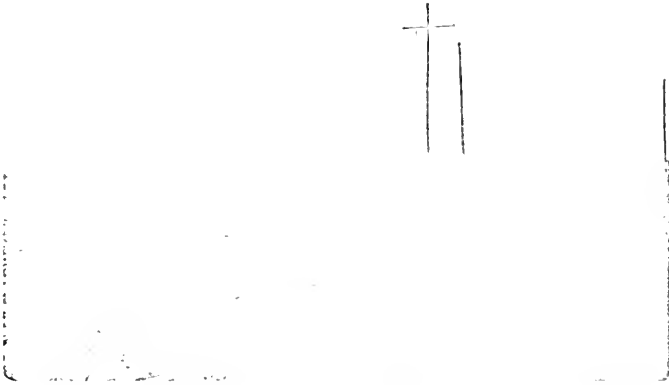


Fig. 4-13.--Presence of large tree stumps interferes with cultivation of this school site located on the prairie north of Paris.

school sites because of personal sentiment. If a site was once owned or the school attended by a family member, the owner is reluctant to destroy or cultivate the site.

Presence of rough terrain would lower the value of the land and discourage the number of interested buyers. In such instances buildings have been sold separately from land because of the difficulty in obtaining bids from people who are not willing to pay extra for the building when their primary interest is the land.¹

Other Uses

Seven school sites (1.2% of the total schools in the study area) are classified as having "other uses". Four (57% of the sites classified as sites with "other uses") are located in the Cash Train Region and have new farm buildings. (Fig. 4-14) Two sites were purchased by adjacent churches. Both locations are utilized for recreational activities. The Martin Box School and site northwest of Charleston was purchased by the church nearby which had no water wall. The water is now pumped across the road to the church. Needing a recreational area more than another building the church members destroyed the buildings and erected a new fence. (Fig. 4-15)

¹ Interview with Coles County Superintendent of Schools, June 8, 1966.




Fig. 4-14.--New farm building constructed on a school site in the Cash Grain Region north of Charleston.

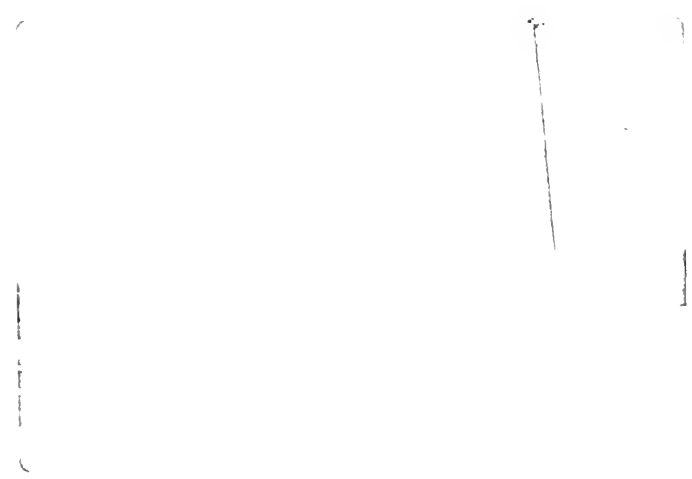


Fig. 4-15.--School grounds utilized as a recreational area adjacent to a rural church within the cash grain region north of Charleston.

CHAPTER V

EVALUATION OF THE STUDY AS A SAMPLING TECHNIQUE

Every sampling technique has its advantages and disadvantages. The technique using school sites as samples is considered to possess three advantages of major importance. These advantages are the selection, distribution, and content of the data collected.

Selection of the Samples

The use of rural school sites as sample areas makes it possible to avoid some problems usually encountered in trying to select valid random samples. An accurate sampling occurs if the data are typical of the area. School sites were chosen prior to the study thus solving the problem of selecting a random sample.

The three hundred eighty-two rural schools observed in this study represent an area of approximately three hundred acres. In the entire study area 1,203,200 acres are included. Limiting observation to only the school sites results in a sampling which represents only .00025 of the entire area.

Distribution of Sample Areas

Few features in east-central Illinois are more evenly spaced than the rural school sites. Only a few school sites are located more than three miles apart. The majority of the schools were established on a two miles spacing. Thus the distribution of

sample areas over an entire study area comprises a rectangular grid pattern.

The fact that there is a school in approximately every four square miles places the distribution of samples on a unit area basis. (e.g. 1 school/4 sq. mi.) Because a school site represents approximately four square miles, the number of sites is in direct proportion to the total area of different regions which is a great benefit to the researcher who attempts to relate data to a unit area. Usually the distribution of schools every four square miles occurs throughout the entire area. If an exception to this unit areal distributional pattern is present, it is significant to the study and can be easily recognized.

The even distribution of school sites also enables the researcher to analyze site uses to discover their patterns of regionality and the factors involved. Variations between different areas may be analyzed with the aid of percentages if a sufficient number of sites are observed.

Content of the Data Collected

The validity of a sampling technique is determined by whether or not the data collected are typical of the entire area. One unique quality in using rural school sites as sample locations is that the sampling is obtained by the researcher from a feature that is common to the entire area in a predetermined distributional pattern. The researcher has no control over selection of sample areas thus removing this one bias possibility.

Homogeneity of the sample areas makes it possible to collect uniform information about each site. Data collected at each site can be immediately compared to view the changes that have occurred to rural schools in different locations. The data are also significant in that both cultural and physical features are considered, thus permitting analysis of relationships between man and his discarded social institutions in view of his cultural motives and environment.

All the rural school sites are samples in a uniform method with the same checklists. (Appendix I) It is possible for several people to observe school sites in different areas and return with data that can be accurately compared.

Enough time has elapsed since most of the schools closed (20 years) to analyze properly the reasons why each school site is utilized as it is today. Analysis of the school buildings and sites helps indicate the geographic personality of an area.

It is difficult to determine whether or not this sampling technique is valid and accurate enough to use in regional analysis of areas. The author feels that it is accurate in this study in view of the actual area sampled, but this does not mean that it will be accurate in other selected areas.

For this to be an accurate sampling technique a very small percentage of the rural schools should still be in operation (probably less than 10%). East-central Illinois is an ideal area to analyze because most of the rural schools have been closed. (Only 3% of the schools observed are operating.) It is also

beneficial for a period of at least fifteen or twenty years to elapse after the schools closed. A fifteen year period is long enough for most of the schools to be purchased by different individuals and the new functions of the buildings and sites to become established.

Much of the school site data are of a cultural nature and their meaning must be interpreted carefully. Many of the social and economic factors are not directly observable and cannot be analyzed as accurately as the more visible physical features.¹ A partial solution to this problem is gained through interviews with owners of school sites and county and state officials. This, however, poses another problem which is the necessity of doing extensive research in libraries, and county and state agencies that is more historical in nature than geographical. Such data are helpful in reconstructing the historical geography of an area to explain the present geographic conditions. This criticism is raised in regard to the nature of the research and interpretation being historical rather than geographical.

Still another problem arises when the observer attempts to decide what to observe at a rural school site. To reduce the possibility of over-looking some important piece of information an extensive checklist is necessary with spaces provided for numerous additional comments.² These checklists are considered to be

¹Jones, Wellington D., "Procedures for Investigating the Human Occupancy of a Region," Annals of the Association of American Geographers, Vol. XXIV, June, 1934, pp. 63-111.

²"Let not a formal checklist stifle genius," C. W. Smith, Ibid.

a significant part of this technique in that the data collected at all the sites are uniform in content and can be easily compared and analyzed.

Whether the researcher observes the site or surrounding land use or both provides another problem which should be considered. In this study the author limited his observation to the immediate site and buildings. Observation could have been extended to the adjacent land utilization in addition to provide further material for comparison.¹ Information concerning surrounding land use was collected; however, emphasis was given to data obtained from observation of the school site itself.

Limitation of proximity to the site also posed an additional problem. For example, within the Cash Grain Region several schools are occupied by families who are not engaged in land agriculture. Nothing can be observed which indicates the site is not located in a farming area although cash grain is cultivated adjacent to the site. The presence of the dwelling is the result of a social factor not directly observable. In these instances observation limited to the use of the school site is not typical of the entire area. However, interviews with the occupants provided highly pertinent information.

Rural school sites cannot be used effectively as sample areas in studies that cover small areas. The great variation in

¹See "The Railway Trunk Line as an Illustration of Regional Change," by Charles Colby for an example of the problems encountered in trying to observe distant features from a close base. Colby is cited in the Annals of the Association of American Geographers, LVIII No. 3; Sept. 1930, p. 457-458.

school site and building utilization requires several sites to be observed to enable observation of regional and other geographical patterns. When a few samples are available there is a possibility of the sites not being typical of the area.

A large study area can be analyzed through the use of this sampling technique; however, other 'shortcuts' are recommended. Observation of the three hundred eighty-two school sites took a total of twenty-one days in order to complete the field work. Although the sampling is a small percentage of the study area, (.0005 of the study area was sampled.) The completeness of the data collected required time. From these school buildings are more commonly used as dwellings required more time as several families were interviewed. Only forty sites were observed in the most productive day of field work.¹

If the study covers more than for the sand square sites it is possible to sample the entire area by selecting traverses across the area. However, selection of traverse locations and determining which school sites to observe along a traverse poses other problems. A partial solution is to select traverse locations of school sites by the possibility of a random sampling method to reduce bias influencing selection of data.

Prior to this study it was the author's belief that a

¹ Concern the speed at which this technique can be operated with a traverse method used by Fred J. Hillon in his paper, Some Problems in Texas Population, Annals of the Association of American Geographers, XXXV, Dec. 1936, pp. 177-188.

sampling of an area is not as accurate as a detailed field study. The author still holds this belief in view of the results disclosed through this study. Limiting the study to rural school sites is only an analysis of a very small percentage of the entire area. It is not a valid assumption that rural school sites in themselves reveal the truest geographic conditions. Many other features must be analyzed together in order to develop the whole geography of an area. However, a study using rural school sites can be of great value to the geographer as a "tool" in developing the geography of an area when time is a limiting factor. A study of the distribution and present utilization of rural school buildings and sites reveals characteristics about an area which could be overlooked by a researcher using other sampling techniques.

CHAPTER VI

SUMMARY

Common and evenly distributed features in east-central Illinois are the rural school sites. Once there were functioning schools spaced every two miles. Today approximately half of the school buildings still remain. The elimination and present use of school buildings and sites forms an interesting and hopefully significant segment in the study of rural geography. Through a study of rural school sites in an area a better understanding of the conditions present in the entire area can be gained.

Only thirteen of a total of three hundred eighty-two former schools (3 per cent) are presently operating within the study area in east-central Illinois. Four of these thirteen operating schools are rural attendance centers of larger districts. The remaining nine schools are attended by Amish children near Arthur.

Many rural schools that closed from 1945-50 were in excellent or relatively good condition. Most of the school sites were sold to the public for less than \$1500 thus making it possible for a large number of non-farming families to move to the rural areas to live with little cash outlay. Eighty-six school buildings are presently occupied (23 per cent of the total) and are generally in areas of rough terrain not easily cultivated.

School buildings which are unoccupied dwellings usually

are in poor condition. An abandoned building is not an asset to the owner especially if he is a farmer whose emphasis is towards cultivation of the site to increase grain production. In such instances the abandoned buildings are usually destroyed in order to cultivate the site.

School buildings are easily and economically converted to farm structures. Machinery, grain, hay, and livestock are commonly stored or sheltered in the buildings with little or no remodeling required. Sections are easily added if a larger building is necessary. A total of seventy-six school buildings are utilized as farm structures. Forty-four (56 per cent of the 76 utilized farm structures) of the school buildings are utilized as farm structures on the Shelbyville Moraine and Springfield Plain in the general farming area. An absence of such buildings occurs in the extensively cultivated Cash Grain Region because it is more advantageous to store cash grain and machinery in larger and more weather resistant structures.

Only seventeen schools (4 per cent of the total) appear to have no function at this time. Four of these seventeen are still owned by the school districts. Most unused school sites are overgrown with vegetation and the windows and doors boarded and locked to prevent vandalism. Seven of the seventeen unused schools are located near Casey and Martinsville. The remaining ten schools are distributed on both flat and rough terrain throughout the study area.

School buildings are also desired by religious and social groups and persons engaged in commercial enterprise. Of the

twenty sites (5 per cent of the total) having religious, social, or commercial uses, fourteen of the buildings have recreational functions while three serve as commercial establishments. The remaining three sites have miscellaneous uses.

A total of one hundred eight school sites (28 per cent of the total) are entirely or partially cultivated. The majority of the total cultivated sites (78) are located in the Cash Grain Region where the land is more of an asset to the owner than are the buildings. Within the Cash Grain Region corn is cultivated on forty-six sites (59 per cent), soybeans on twenty-two sites (28 per cent), and wheat on two sites (3 per cent).

South of the Shelbyville Moraine is the General Farming Region and small portions of the General Farming-Dairy and Grain and Livestock Regions as recognized by Ross and Case. In these regions the increasing number of entirely or partially cultivated school sites indicates the recent emphasis towards cash grain farming in the area. Corn is observed on fifteen of the thirty sites (50 per cent) and soybeans on seven sites (23 per cent). Most of these sites were on the interfluvies where large fields are becoming common. The emphasis towards cash grain farming is great enough to suggest the recognition of most of Cumberland County and the western portion of Clark County as being predominately in a cash grain area which is separated from the Cash Grain Region to the north by the presence of the Shelbyville Moraine.

Twenty-three new dwellings (6 per cent of the total) are constructed on former school sites. The owner prefers to build

on the school site to take advantage of the scenic location and the availability of an excellent water well. Former school buildings were generally in poor condition which made remodeling unattractive. Many of the new dwellings appear to possess modern conveniences not present in a remodeled school building. Most of the school sites with new dwellings are in areas of rough terrain which are not easily cultivated.

Twenty school sites (5 per cent of the total) are entirely pastured and the buildings removed. Such sites are generally in areas of greater relief throughout the study area where livestock farming is practiced. All twenty sites were added to adjacent pasture areas.

A school site with the buildings moved or destroyed is usually placed into cultivation. Exceptions to this practice occur when large trees or rough terrain are present on the site. Another factor to consider is the "whim" of the owner who because of sentimental attachment to the site may not sell or cultivate it.

Seven sites (2 per cent of the total) are classified as having "other uses". These sites are utilized for the location of new farm buildings or are left vacant for recreational needs of nearby churches or social groups.

This study as a sampling method is of value to the researcher who is limited in time in which to do a regional analysis of an area. Rural school sites are reliable samples of an area. Both cultural and physical features are emphasized thus gaining an accurate insight into the geography of an area. Data from such a study reveal geographic patterns and conditions present in an area but are

usually difficult to analyze. Uniformity of the samples enables the researcher to analyze the geographic personality of different areas with a high degree of uniformity.

Rural schools, once a common landmark in east-central Illinois, are rapidly falling victims to the farmer and his machinery. Fewer rural school buildings will remain each year as their deterioration warrants destruction. This is an appropriate time to collect data on rural school sites before they are completely removed from observation. The time has come to restore and safeguard a few rural schools in order that a segment of American History can be retained. In a few years it will be too late.

BIBLIOGRAPHY

- Earl, Edward C. The Schoolhouse. (Washington, D.C., 1913).
- Garland, John H. The North American Midwest. New York: John Wiley and Sons, 1955.
- Illinois Education Association. "Community Unit Schools." Dec. 1952.
- Jones, Wellington D., "Procedures for Investigating the Human Occupancy of a Region," Annals of the Association of American Geographers, Vol. XXIV, June, 1934, pp. 93-111.
- Leighton, M.M., Ekblaw, George E., and Herber, Leland. "Physiographic Divisions of Illinois." Abstract.
- Office of the Superintendent of Public Instruction, State of Illinois. The School Code of Illinois. Ray Waco, Superintendent, 1963.
- Price, Dallas L. and Fleming, Lois. "The Ill-Understood Community of Arthur, Illinois." Bulletin of the Illinois Geographical Society. Vol. VII, June, 1945.
- Ross, R.C., and Case, H.C.M. Types of Farming in Illinois: an Analysis of Differences by Areas. University of Illinois Agricultural Experiment Station, Bulletin 691. 1956.
- United States Department of Rural Education. Your School District. 1948.
- York, Troyt S. "An Interpretation of Agricultural Land Use across the Shelbyville Moraine." unpublished Master's Thesis, 1963. Department of Geography of Eastern Illinois University.

1970
 1971

Use of Site	1970	1971	1972
Unoccupied			
Swelling - -			
Unoccupied	10	24	11
Swelling - -			
Unoccupied	10	5	6
Farm			
Swelling - -	22	1	1
Unoccupied	0	1	1
Other	3	0	2

Use of
 Site

Unoccupied			
Site entirely unoccupied	52	0	22
Swelling - -	32	1	1
Unoccupied	14	1	1
Swelling - -	1	1	1
Unoccupied	2	1	1
Swelling - -	1	1	1
Site entirely unoccupied	12	1	1
Swelling - -			
Unoccupied	0	6	
Vacant	0	3	12
Other	4	4	1
Total	170	17	140

